

REMARKS

In the Final Official Action, the Examiner rejected claims 1-20. In this Amendment and Response, the Applicants amended claims 1, 5-7, and 13 to *clarify* the unique aspects of the present claims to expedite allowance of the pending claims 1-20. In addition, as discussed in detail below, the Applicants stress that the Examiner must give patentable weight to the functional language recited in the instant claims. In the Advisory Action, the Examiner cited *In re Hutchinson* to deprecate functional language. *In re Hutchinson*, 154 F.2d 135, 138 (C.C.P.A. 1946). After careful review of this case, the Applicants emphasize that the claim language of *In re Hutchinson* is specifically “adapted for use” language in the *introductory clause or preamble* of the claim rather than the *body* of the claim. *See id.* Accordingly, the Applicants present the following case law, which clearly indicates that functional language must be given patentable weight in the *body* of a claim. In view of the foregoing amendment and the following remarks, the Applicants respectfully request reconsideration and allowance of all pending claims.

Claim Rejections – 35 U.S.C. § 102

The Examiner rejected claims 1, 2, and 6 under U.S.C. § 102 as anticipated by Klein et al. (U.S. Patent No. 6,186,800). Applicants respectfully traverse these rejections.

Legal Precedent

First, Applicants remind the Examiner that, during patent examination, the pending claims must be given a claim interpretation that is *reasonable* and *consistent* with the specification. *See In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); *see also In re Morris*, 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); *see also* M.P.E.P. §§ 608.01(o) and 2111. Interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *See In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); *see also* M.P.E.P. § 2111. As further explained in Section 2111.01 of the M.P.E.P., the words of the claim must be given their plain meaning unless the applicant has provided a clear definition in the specification. *See In re Zletz*, 893 F.2d 319, 321, 13 U.S.P.Q.2d 1320, 1322 (Fed. Cir.

1989). Again, the plain meaning refers to an interpretation by those of ordinary skill in the art. *See In re Sneed*, 710 F.2d 1544, 218 U.S.P.Q. 385 (Fed. Cir. 1983).

Second, anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, the Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention “*in as complete detail as contained in the . . . claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Third, if the Examiner relies on a theory of inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *In re Robertson*, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999) (Emphasis Added). The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient. *Id.* In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The Examiner, in presenting the inherency argument, bears the evidentiary burden and must adequately satisfy this burden. *See id.*

Fourth, regarding functional limitations, the Examiner must evaluate and consider the functional limitation, just like any other limitation of the claim, for what it fairly conveys

to a person of ordinary skill in the pertinent art in the context in which it is used. See M.P.E.P. § 2173.05(g); *In re Swinehart*, 169 U.S.P.Q. 226, 229 (C.C.P.A. 1971); *In re Schreiber*, 44 U.S.P.Q.2d 1429, 1432 (Fed. Cir. 1997). If the Examiner believes the functional limitation to be inherent in the cited reference, then the Examiner "must provide some evidence or scientific reasoning to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art." *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Inter. 1986).

Klein et al. Do Not Anticipate Claims 1, 2, and 6

As discussed below, the claimed technique *does* have patentably distinct elements not found in the references cited by the Examiner. For example, amended independent claim 1 recites, *inter alia*:

attaching an electrically conducting mounting stud to chassis;
attaching a ground clip adjacent a *mounting hole in the circuit board*;
extending a portion of the mounting stud *through the mounting hole*; and
positively engaging the ground clip with *opposite sides of the portion* of the
mounting stud.

First, as asserted in the previous Response, the Applicants reiterate that Klein et al. clearly fails to teach or suggest a mounting stud *extending through* the mounting hole in the circuit board, as recited in claim 1. In the Response to Arguments section of the Final Office Action, the Examiner asserted:

However, Claim 1 does not claim the mounting stud is *extending through* the board. On the other hand, Klein et al disclose positioning the mounting stud through the mounting hole, since a screw, which is a component of the mounting stud and connected with a hole (22) of the stud through the mounting hole, will adjust position of the mounting stud (col. 5, lines 52-55).

Paper 10, page 5. Although the Applicants do not necessarily agree with the Examiner, the Applicants amended claim 1 to clarify the orientation of the mounting stud relative to the mounting hole in the circuit board. In view of this amendment, the Applicants emphasize that claim 1 clearly recites "*extending a portion of the mounting stud through the mounting hole*," which is disposed *in* the circuit board.

In contrast, Klein et al. teaches a mounting boss 10a engaged with a bracket 9a on only one side of a motherboard 2a, such that the mounting boss 10a *never extends through* the motherboard 2a. Col. 2, line 62 – Col. 3, line 1; Col. 4, lines 40-46; Col. 8, lines 35-37. Thus, the Klein et al. reference fails to teach or suggest the mounting stud *extending through* the mounting hole, as recited in claim 1.

Second, Klein et al. fails to teach or suggest “*positively engaging* the ground clip with opposite sides of the *portion* of the mounting stud,” as recited in claim 1. In the Office Action, the Examiner asserted that a *screw* is a component of the mounting stud that extends through the circuit board. See Paper 10, page 5. Again, although Applicants disagree with the Examiner’s assertion, the screw is incapable of being positively engaged by a ground clip, as recited in claim 1. Given that the screw is disposed inside the hole 22 of the mounting boss 10a, the bracket 9a cannot positively engage the screw. See Fig. 4; Col. 4, lines 37-46; Col. 5, lines 44-55. Moreover, the head of the screw is only accessible on the opposite side of the motherboard 2a relative to the mounting boss 10a and the bracket 9a. See *id.* Thus, the Klein et al. reference fails to teach or suggest a ground clip *positively engaging a portion* of the mounting stud *extended through* the circuit board, as recited in claim 1.

In view of the foregoing deficiencies of Klein et al., the Applicants respectfully request the Examiner withdraw the rejection of independent claim 1 and its dependent claims under 35 U.S.C. § 102.

Claim Rejections – 35 U.S.C. § 103(a)

The Examiner rejected claims 3-5 and 7-20 under 35 USC 103 as unpatentable over Klein et al in view of various secondary references. The Applicants respectfully traverse these rejections in view of the foregoing amendments and the following legal precedent and remarks.

Legal Precedent

First, the burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d. 1430 (Fed. Cir. 1990). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). The Examiner must provide objective evidence, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002). Moreover, a statement that the proposed modification would have been “well within the ordinary skill of the art” based on individual knowledge of the claimed elements cannot be relied upon to establish a *prima facie* case of obviousness without some *objective reason to combine* the teachings of the references. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d. 1313, 1318 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d. 1161 (Fed. Cir. 1999).

Second, when prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to

deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Third, it is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983); M.P.E.P. § 2145. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959); see M.P.E.P. § 2143.01.

Fourth, regarding functional claim language, the M.P.E.P. § 2173.05(g) specifically states that:

There is *nothing inherently wrong* with defining some part of an invention in *functional terms* . . . A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used.

M.P.E.P. § 2173.05(g) (citing *In re Swinehart*, 439 F.2d 210, 213, 169 U.S.P.Q. 226, 228-29 (C.C.P.A. 1971) (emphasis added). Indeed, courts have recognized that there may be a practical *necessity* for the use of functional language. See *In re Swinehart*, 439 F.2d 210, 213, 169 U.S.P.Q. 226, 228-29 (C.C.P.A. 1971) (emphasis added). Under the view today, functional language in a claim is not objectionable *per se* so long as it avoids problems of undue breadth and vagueness. See Donald S. Chisim, CHISIM ON PATENTS § 8.04, p. 8-99 (citing *In re Swinehart*, 169 U.S.P.Q. at 226). What is important is *not* simply that a recitation is defined in terms of what it does, but that the recitation has a reasonably well-understood meaning in the art. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583, 39 U.S.P.Q.2d 1783, 1786 (Fed. Cir. 1996) (further stating that “many devices take their names from the functions they perform . . . [and that] ‘detent’ (or its equivalent ‘detent mechanism’) is just such a term”). In other words, so long as a recitation is readily understood by those in the pertinent art (*i.e.*, it is not vague and unduly broad), it must be given patentable weight.

Deficiencies of Cited References

In view of the reasons discussed above with reference to claims 1, 2 and 6, the Applicants believe these rejections are moot. The Applicants further stress that the cited references do not teach or suggest a ground clip adapted to spring open about a mounting stud *nose*, as recited by independent claim 7. Moreover, the cited references do not teach or suggest a ground clip adapted to spring open about an *upper nose* of a mounting stud, as recited by independent claim 13.

In the Advisory Action, the Examiner cited *In re Hutchinson* to deprecate the use of functional language in these claims. *In re Hutchinson*, 154 F.2d 135, 138 (C.C.P.A. 1946). However, the *Hutchinson* case is focused on intended *use* recited in the *preamble*, rather than functional limitations recited in the *body* of a claim. *See id.* As discussed in the foregoing *legal precedent* section, functional language “must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art.” M.P.E.P. § 2173.05(g) (citing *In re Swinehart*, 439 F.2d 210, 213, 169 U.S.P.Q. 226, 228-29 (C.C.P.A. 1971) (emphasis added)). Accordingly, the Applicants reiterate that the functional language recited in the foregoing claims must be given patentable weight. Considering each claim as a whole including functional limitations, the Applicants stress that the cited references taken alone or in combination fail to teach or suggest the instant claims.

In view of these deficiencies, the Applicants respectfully request the Examiner withdraw the rejection of claims 3-5 and 7-20 under 35 U.S.C. § 103.

Removal of Paquin Reference

In the previous Office Action, the Applicants requested that the Examiner remove Paquin (6,424,538) from consideration in accordance with 35 U.S.C. § 103(c) and M.P.E.P. § 706.02(l), because the present application and Paquin (6,424,538) were, at the time the invention was made, owned by, or subject to an obligation of assignment to, Compaq Information Technologies Group, L.P.

However, in the present Office Action, the Examiner responded to the Applicants' previous averment of common ownership, stating:

According to Applicants (p. 6 of the Amendment), Paquin (6,424,538) should be removed under p. 103c. However, it is necessary to confirm that the invention was made in a division of Compaq not in a division of Hewlett-Packard.

Paper 10, page 6.

Applicants remind the Examiner that common ownership is established without evidentiary support "if the applicant(s) or an attorney or agent of record makes a statement to the effect that the application and the reference were, at the time the invention was made, owned by, or subject to an obligation of assignment to, the same person(s) or organization(s)." M.P.E.P. § 706.02(1)(3).

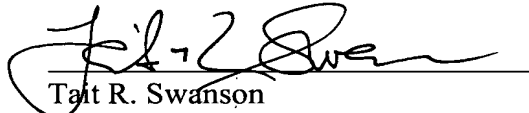
After an additional review of the assignment documents for Paquin and the present application, the Applicants wish to clarify the previous averment of common ownership. Accordingly, the Applicants respectfully stress that Paquin (6,424,538) should be removed from consideration in accordance with 35 U.S.C. § 103(c) and M.P.E.P. § 706.02(1), because the present application and Paquin (6,424,538) were, at the time the invention was made, owned by, or subject to an obligation of assignment to, Compaq Information Technologies Group, L.P., *successor in interest to Compaq Computer Corporation*. Therefore, the Applicants respectfully request that the Examiner remove Paquin (6,424,538) from consideration. After Paquin (6,424,538) is removed according to 35 U.S.C. § 103(c), the Examiner's arguments regarding Paquin are moot.

Conclusion

The Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: April 8, 2004


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